	Application No.	Applicant(s)
Notice of Allowability	10/711,230	HOWE ET AL.
	Examiner	Art Unit	
	Qamrun Nahar	2191	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *the amendment filed on 11/29/2007*.

2. ☒ The allowed claim(s) is/are *1, 3-28, 30-31, 33-48, 50-51 and 53-60, renumbered 1-55*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some*   c) ☐ None of the:

        1. ☐ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

        3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

        1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of
    Paper No./Mail Date _____ .

    Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application

6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

DETAILED ACTION

1.   This action is in response to the amendment filed on 11/29/2007.

2.   The objection to the oath/declaration is withdrawn in view of applicant's submission of

oath/declaration on 11/29/2007.

3.   The objection to the specification is withdrawn in view of applicant's amendment.

4.   The rejection under 35 U.S.C. 101 because the claimed invention is directed to non-

statutory subject matter to claims 16-30 is withdrawn in view of applicant's amendment.

5.   The rejection under 35 U.S.C. 102(b) as being anticipated by Li, et al., "Tool Support for

Refactoring Functional Programs", August 28, 2003 (hereinafter Li) to claims 1-60 is withdrawn

in view of applicant's amendment, Examiner's Amendment, and remarks/arguments.

6.   Claims 1, 16, 31, 45 and 49-52 have been amended.

7.   Claim 29 has been canceled.

8.   Claims 1, 3-5, 16, 31, 33-35, 37, 45, 50 and 51 have been amended by Examiner's

Amendment below.

9.   Claims 2, 32, 49 and 52 have been canceled by Examiner's Amendment below.

10.   Claims 1, 3-28, 30-31, 33-48, 50-51 and 53-60 are pending.

11.   Claims 1, 3-28, 30-31, 33-48, 50-51 and 53-60 are allowed, renumbered 1-55.

EXAMINER'S AMENDMENT

12.   An examiner's amendment to the record appears below. Should the changes and/or

additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR

1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the

payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with G.

Mack Riddle (Reg. No. 55,572) on December 19, 2007.

The application has been amended as follows:

In the Claims:

Please cancel claims 2, 32, 49 and 52; and

Please amend claims 1, 3-5, 16, 31, 33-35, 37, 45, 50 and 51 as follows:

Claim 1 (Currently Amended),

At line 12, after "project" insert : wherein the dependent software module is refactored

with assistance of a symbol table used for resolving symbol references, and wherein said

automatically propagating step includes: copying symbol information about the particular

symbol used for the software module of the first project into the symbol table used for

refactoring the dependent software module

2.   (Canceled)

Claim 3 (Currently Amended),

At line 1, after "claim", delete [2] and insert 1

Claim 4 (Currently Amended),

At line 1, after "claim", delete [2] and insert 1

Claim 5 (Currently Amended),

At line 1, after "claim", delete [2] and insert 1

Claim 16 (Currently Amended),

At line 4, after "memory;" insert a refactoring module for refactoring the first software

module to propagate a change to all instances of a particular symbol in the first software module

in response to the change that affects the particular symbol of the first software module;

At line 5, before "about", delete [information] and insert meta data

At line 6, before "refactoring", delete [a] and insert the

At line 8, after "about", delete [at least one] and insert the particular

At line 11, before "refactoring module", delete [a] and insert the

At line 11, after "automatically" insert propagating the change to the second software

module by

At line 13, before "about", delete [information] and insert meta data

Claim 31 (Currently Amended),

At line 6, after "software program" insert at a given point in time

At line 7, before "applying", delete [subsequently,] and insert <u>at a subsequent point in</u>

<u>time,</u>

At line 9, after "recorded information" insert <u>: wherein the second software program is</u>

<u>refactored with assistance of a symbol table used for resolving symbol references, and wherein</u>

<u>said applying step includes: copying information about at least one symbol used in the first</u>

<u>software program into the symbol table used for refactoring the second software program</u>

32.   (Canceled)

Claim 33 (Currently Amended),

At line 1, after "claim", delete [32] and insert <u>31</u>

Claim 34 (Currently Amended),

At line 1, after "claim", delete [32] and insert <u>31</u>

Claim 35 (Currently Amended),

At line 1, after "claim", delete [32] and insert <u>31</u>

Claim 37 (Currently Amended),

At line 1, after "claim", delete [32] and insert <u>31</u>

Claim 45 (Currently Amended),

At line 4, after "module" insert <u>at a given point in time</u>

At line 5, before "refactoring", delete [subsequently,] and insert <u>at a subsequent point in time,</u>

At line 8, after "module;" insert <u>wherein said creating substep includes creating source code based on the first software module and the recorded information;</u>

At line 9, after "for", delete [a] and insert <u>the</u>

At line 10, after "module;" insert <u>wherein said injecting substep includes indirectly injecting symbol table entries for a class into the symbol table by parsing the source code and directly injecting symbol table entries for members of the class into the symbol table;</u>

49.   (Canceled)

Claim 50 (Currently Amended),

At line 1, after "claim", delete [49] and insert <u>45</u>

Claim 51 (Currently Amended),

At line 1, after "claim", delete [49] and insert <u>45</u>

52.   (Canceled)

- END -

REASONS FOR ALLOWANCE

13.   The following is an examiner's statement of reasons for allowance:

The cited prior art taken alone or in combination fail to teach, in combination with the other claimed limitations, at a subsequent point in time, automatically propagating the change to a dependent software module residing in a second project, by refactoring the dependent software module based on the recorded meta data about the refactoring that occurred to the software module of the first project; wherein the dependent software module is refactored with assistance of a symbol table used for resolving symbol references, and wherein said automatically propagating step includes: copying symbol information about the particular symbol used for the software module of the first project into the symbol table used for refactoring the dependent software module as substantially recited in independent claims 1, 16, 31, and 45.

The closest cited prior art, Li teaches a method of refactoring a software module. However, Li fails to teach at a subsequent point in time, automatically propagating the change to a dependent software module residing in a second project, by refactoring the dependent software module based on the recorded meta data about the refactoring that occurred to the software module of the first project; wherein the dependent software module is refactored with assistance of a symbol table used for resolving symbol references, and wherein said automatically propagating step includes: copying symbol information about the particular symbol used for the software module of the first project into the symbol table used for refactoring the dependent software module as substantially recited in independent claims 1, 16, 31, and 45; and as pointed out by the applicant's remarks/arguments on pg. 17, par. 2 to pg. 22, par. 2.

Any comments considered necessary by applicant must be submitted no later than the

payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for

Allowance."

Conclusion

14.   Any inquiry concerning this communication from the examiner should be directed to

Qamrun Nahar whose telephone number is (571) 272-3730. The examiner can normally be

reached on Mondays through Fridays from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Wei Y Zhen, can be reached on (571) 272-3708. The fax phone number for the

organization where this application or processing is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the TC 2100 Group receptionist whose telephone number is 571-272-2100.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Qamrun Nahar
December 19, 2007

ERIC B. KISS
EXAMINER